



Sheet 1 of 1

Form PTO-1449 U.S. Department of Commerce (Rev. 8-88) Patent and Trademark Office INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Attorney Docket No.: 1201.65680	Serial No.: 09/990,250
	Applicant: Nayfeh et al.	
	Filing Date: Nov. 21, 2001	Group: 1754

U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
MM	3,597,624	Aug. 3, 1971	David Weiner	307	88.3	—
MM	5,537,000	Jul. 16, 1996	Alivisatos et al.	313	50	RECEIVED
MM	5,703,896	Dec. 30, 1997	Pankove et al.	372	50	FEB 12 2003
MM	5,881,200	Mar. 9, 1999	Burt	385	142	TC 1700
MM	5,906,670	May 25, 1999	Dobson et al.	75	370	—
MM	6,326,311	Dec. 4, 2001	Ueda et al.	438	694	—
MM	6,407,424	June 18, 2002	Forbes	257	315	—

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
MM	0354 141	Feb. 7, 1990	EP	—	—	X	

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MM	Gennadiy Belomoin, Joel Therrien, and Munir Nayfeh, "Oxide and hydrogen capped ultrasmall blue luminescent Si nanoparticles", Applied Physics Letters, Volume 77, Number 6, 7 August 2000, pp. 779-780.
MM	M.L. Brongersma, K.S. Min, E. Boer, T.Tambo, A. Polman, and H.A. Atwater, "Tailoring the Optical Properties of Si Nanocrystals in SiO ₂ Materials Issues and Nanocrystal Laser Perspectives", Mat. Res. Soc. Symp. Proc., Vol. 486, 1998 Materials Research Society, pp. 213-217.
MM	L.E. Brus, P.F. Szajowski, W.L. Wilson, T.D. Harris, S. Schuppler, and P.H. Citrin, "Electronic Spectroscopy and Photophysics of Si Nanocrystals: Relationship to Bulk c-Si and Porous Si", J. Am. Chem. Soc., 1995, Vol. 117, pp. 2915-2922.
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Examiner <i>Maribel Medina</i>	Date Considered <i>5/5/2003</i>
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mm	4,931,692	Jun. 5, 1990	Takagi et al.	313	503	—
mm	5,308,804	May 3, 1994	Lee	501	17	—
mm	5,527,386	Jun. 18, 1996	Statz	106	481	—
mm	5,561,679	Oct. 1, 1996	Mannik et al.	372	43	—
mm	5,690,807	Nov. 25, 1997	Clark, Jr. et al.	205	655	—
mm	5,695,617	Dec. 9, 1997	Graiver et al.	204	157.41	—
mm	5,714,766	Feb. 3, 1998	Chen et al.	257	17	—
mm	5,747,180	May 5, 1998	Miller et al.	428	601	—
mm	5,770,022	Jun. 23, 1998	Chang et al.	204	164	—
mm	5,891,548	Apr. 6, 1999	Graiver et al.	428	98	—
mm	5,932,889	Aug. 3, 1999	Matsumura et al.	257	14	—
mm	5,942,748	Aug. 24, 1999	Russell et al.	250	214.1	—
mm	6,060,743	Jun. 9, 2000	Sugiyama et al.	257	321	—

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						Yes	No

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mm	Sandip Tiwari, Farhan Rana, Hussein Hanafi, Allan Hartstein, Emmanuel F. Crabbé, and Kevin Chan, "A silicon nanocrystals based memory", Appl. Phys. Lett., Vol. 68, No.10, March 4, 1996, pp. 1377-1379.
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mm	J. Erland, P. Yu, S.I. Bozhevolnyi, J.M. Hvam, N.N. Ledentsov, "Second harmonic spectroscopy of semiconductor nanostructures", Quantum Electronics and Laser Science Conference Technical Digest, May 1999, pp. 233-234.
mm	L. Pavesi, L. Dal Negro, C. Mazzoleni, G. Franzo and F. Priolo, "Optical gain in silicon nanocrystals", Nature, Vol. 408, November 23, 2000, pp. 440-443.
mm	D.J. DiMaria, J.R. Kirtley, E.J. Pakulis, D.W. Dong, T.S. Kuan, F.L. Pesavento, T.N. Theis, J.A. Cutro, and S.D. Brorson, "Electroluminescence studies in silicon dioxide films containing tiny silicon islands", J. Appl. Phys., Vol. 56, No. 2, July 15, 1984, pp. 401-416.
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mm	K.A. Littau, P.J. Szajowski, A.J. Muller, A.R. Kortan, and L.E. Brus, "A Luminescent Silicon Nanocrystal Colloid via a High-Temperature Aerosol Reaction", The Journal of Physical Chemistry, Vol. 97, No. 6, 1993, pp. 1224-1230.
mm	Anton Fojtik, Arnim Henglein, "Luminescent colloidal silicon particles", Chemical Physics Letters 221, April 29, 1994, pp. 363-367.
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mm	M. Nayfeh, "Fabrication of Nanometer Scale Structures", SPIE Institutes, Vol. IS 10, (1993), pp. 200-217.
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mm	W.H. Thompson, Z. Yamani, L. Abu Hassan, O. Gurdal, M. Nayfeh, "The Effect of Ultrathin Oxides on Luminescent Silicon Nanocrystallites", <i>Appl. Phys. Lett.</i> , Vol. 73, No. 6, August 10, 1998, pp. 841-43.
mm	M.H. Nayfeh, N. Rigakis, Z. Yamani, "Photoexcitation of Si-Si Radiative Surface States in Nanocrystallites", <i>Mat. Res. Soc. Symp. Proc.</i> , Vol. 486, 1998, pp. 243-248.
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mm	L.T. Canham, "Silicon Quantum Wire Array Fabrication by Electrochemical and Chemical Dissolution of Wafers", <i>Appl. Phys. Lett.</i> , Vol. 57, No. 10, September 3, 1990, pp. 1046-48.
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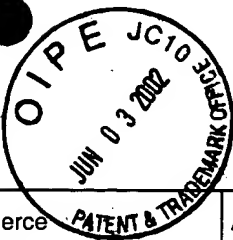
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mm	U.S. Patent Application Nayfeh et al., Serial number 09/781,147, entitled SILICON NANOPARTICLE ELECTRONIC SWITCHES, filed on February 9, 2001.
mm	U.S. Patent Application Nayfeh et al., Serial number 09/572,121 entitled SILICON NANOPARTICLE MICROCRYSTAL NONLINEAR OPTICAL DEVICES, filed on May 17, 2000.
mm	U.S. Patent Application Nayfeh et al., Serial number 09/496,506 entitled SILICON NANOPARTICLE FIELD EFFECT TRANSISTOR AND TRANSISTOR MEMORY DEVICE, filed on February 2, 2000.
mm	U.S. Patent Application Nayfeh et al., Serial number 09/426,204 entitled SILICON NANOPARTICLE STIMULATED EMISSION DEVICES, filed on October 25, 1999.

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